

## 62. *Discosiphonella*, a New Ally of *Amblysiphonella*.

By Yutaka INAI.

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*Discosiphonella*, gen. nov.

Genotype: *Discosiphonella manchuriensis*, sp. nov. Monotypic at present.

*Discosiphonella manchuriensis*, sp. nov.

Figs. 1-4.

Holotype: A well preserved specimen representing nearly one half of the whole body; stored in the Institute of Geology and Palaeontology, Tôhoku Imperial University, Reg. No. 59751.

Paratype: A weathered specimen, stored in the same Institute, Reg. No. 59752.

Locality: North of Ma-i-tsun-kou, about 5 km. west of Pen-chi-hu, Pen-hsi-hsien, Manchoukuo. Collected by the author.

Geological formation: The second limestone from above in the Upper Carboniferous Hsiao-shih Series of the Tai-tzu-ho System of the author.<sup>1)</sup>

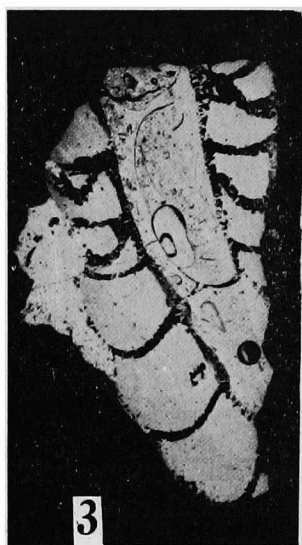
Description: Body discoidal, pouch-like, with rounded periphery, symmetrical on two planes at right angle through the center of aperture at the anterior margin, slightly expanded from the posterior end to aperture; outer surface more or less botryoidal, being divided into many rounded polygonous and finely perforated fields. Aperture elongated along the longer axis of the body.

Coelon or central chamber discoidal, corresponding to the external shape of the body, partitioned transversely by imperforated lamellae at irregular intervals into chamberlets of very irregular shape and variable size; partitions usually concave to the anterior.

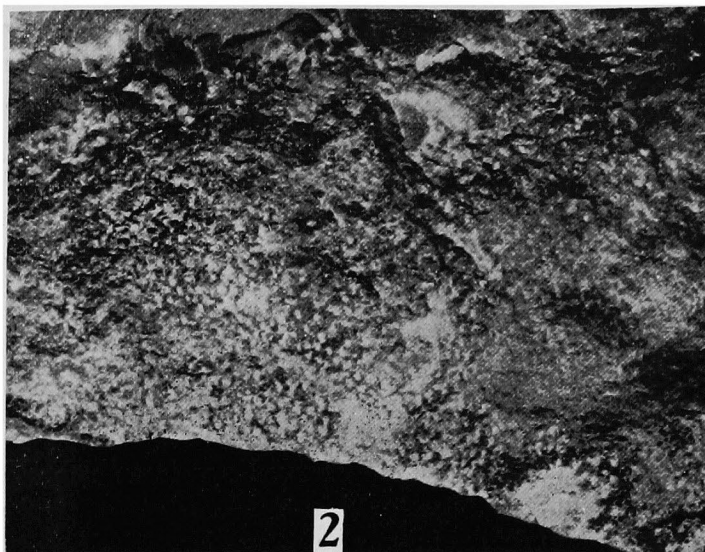
Coelon surrounded by numerous cells arranged in a layer. Cells yielding to the external surface of the body a botryoidal aspect, overlap one another anteriorly and outwardly; variable in size and shape, but usually more or less rounded; surrounded by a finely poriferous wall and often irregularly partitioned in their interior by imperforate lamellae. Cells somewhat thickened around aperture; ca. 1 cm. in average height and nearly as high as coelon, wall 1-2 mm. thick; perforation of wall rather uniform in size (0.24-0.30 mm.) and 3-4 counted in 1 mm. square. Body  $3 \times 10.5 \times 11$  cm. in size, the last term being by estimation.

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1) Y. Inai: Contributions from the Institute of Geology and Palaeontology, Tôhoku Imperial University, in Japanese Language, No. 13, 1935. The limestone is very rich in fossils and K. Ozaki once recorded from it the occurrence of *Spirifer fasciger* Kayserling, *mosquensis* Fischer, cfr. *nikitinii* Tschern., *Enteleles lamarcki* Fischer and many other brachiopods. K. Ozaki: Upper Carboniferous Brachiopods from N. China. Bull. Shanghai Sci. Inst., Vol. I, No. 6, 1931.



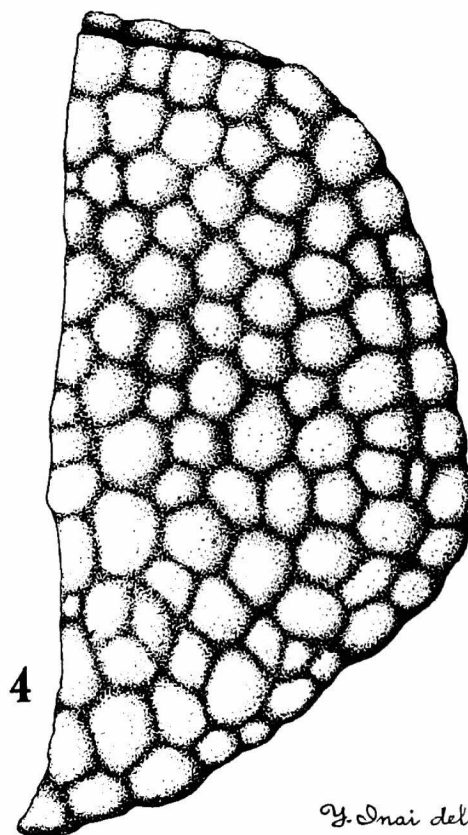
3



2



1



4

Y. Inai del.

Remarks: This remarkable fossil comes closest to *Amblysiphonella* which is usually regarded to belong to the Calcispongiae; but the two are evidently quite distinct, the body being discoidal and pouch-like in the former and columnar and transversely annulated in the latter, with corresponding difference in the arrangement of cells around the central coelon. No other genus is liable to be confounded with this.

Finally the author wishes to record his warmest thanks to Prof. H. Yabe of the Institute of Geology and Palaeontology, Tôhoku Imperial University under whose care the present study was performed.

#### Explanation of Figures.

Figures 1-4. *Discosiphonella manchuriensis*.

1. Weathered surface, nearly in antero-posterior section along the shorter axis.  $\times 1$
2. Weathered external surface, showing perforated wall.  $\times 2$
3. A transverse section near and almost parallel to aperture.  $\times 1$
4. Restoration, outside view, showing aperture of coelon at the anterior margin.  $\times 1$